# VOLUME CONTENTS

## Number 1


| | | |
|---|---|---|
| *A. N. Williams, W. Li and K. -H. Wang* | 1 | Water wave interaction with a floating porous cylinder |
| *F. R. Driscoll, R. G. Lueck and M. Nahon* | 29 | The motion of a deep-sea remotely operated vehicle system<br>Part 1: Motion observations |
| *F. R. Driscoll, R. G. Lueck and M. Nahon* | 57 | The motion of a deep-sea remotely operated vehicle system<br>Part 2: Analytical model |
| *T. L. Walton Jr* | 77 | Separation of shoreline change signal from random noise |
| *S.-K. Lee* | 87 | The calculation of zig-zag maneuver in regular waves with use of the impulse response functions |
| *A. García-Gómez* | 97 | On the form factor scale effect |


## Number 2


| | | |
|---|---|---|
| *G. J. Grigoropoulos, T. A. Loukakis and A. N. Perakis* | 111 | Seakeeping standard series for oblique seas (a synopsis) |
| *D.-S. Jeng and L. Cheng* | 127 | Wave-induced seabed instability around a buried pipeline in a poro-elastic seabed |
| *G. Rajasekaran and S. Narasimha Rao* | 147 | Pollutants behaviour and temperature effect on chemical piles treated marine clay |
| *T. M. Madhavan Pillai and A. Meher Prasad* | 167 | Fatigue reliability analysis in time domain for inspection strategy of fixed offshore structures |
| *Y. H. Wu and J.-W. Tian* | 187 | Mathematical analysis of long-wave breaking on open channels with bottom friction |
| | | Technical Note |
| *R. Latorre and J. Mims* | 203 | Development and deployment of a stable tow body |
| | 219 | Book review |

## Number 3


| | | |
|---|---|---|
| *A. N. Williams, H. S. Lee and Z. Huang* | 221 | Floating pontoon breakwaters |
| *I. A. Sibetheros, O. R. Rijken and J. M. Niedzwecki* | 241 | Volterra series-based system analysis of random wave interaction with a horizontal cylinder |
| *C. Lei, L. Cheng and K. Kavanagh* | 271 | A finite difference solution of the shear flow over a circular cylinder |
| *V. Vengatesan, K. S. Varyani and N. Barltrop* | 291 | An experimental investigation of hydrodynamic coefficients for a vertical truncated rectangular cylinder due to regular and random waves |
| | | Technical Note |
| *S.-W. Twu and C.-C. Chieu* | 315 | A highly wave dissipation offshore breakwater |


## Number 4


| | | |
|---|---|---|
| *C. T. F. Ross and G. A. Waterman* | 331 | Inelastic instability of circular corrugated cylinders under external hydrostatic pressure |
| *A. A. Fernandes, Y. V. B. Sarma and H. B. Menon* | 345 | Directional spectrum of ocean waves from array measurements using phase/time/path difference methods |
| *A. G. Abul-Azm and M. R. Gesraha* | 365 | Approximation to the hydrodynamics of floating pontoons under oblique waves |
| *C. A. Rossit and P. A. A. Laura* | 385 | Unsteady thermoelastic analysis of a circular disk with a hot central core and subjected to adiabatic conditions |
| *H. Hua Lee and P.-W. Wang* | 393 | Analytical solution on the surge motion of tension-leg twin platform structural systems |
| *J. N. Hartnack* | 417 | Short gravity waves on steady non-uniform currents obtained through up-/downwelling |
| | | Technical Note |
| *A. Bayram* | 445 | Experimental study of a sloping float breakwater |

## Number 5


| | | |
|---|---|---|
| *J. Wu and A. T. Chwang* | 455 | A hydrodynamic model of a two-part underwater towed system |
| *N. Y. Kershenbaum, S. A. Mebarkia and H. S. Choi* | 473 | Behavior of marine pipelines under seismic faults |
| *Y. -X. Yu, S. -X. Liu, Y. S. Li and O. W. H. Wai* | 489 | Refraction and diffraction of random waves through breakwater |
| *I. G. Jonsson, P. Thorup and H. T. Tamašauskas* | 511 | Accuracy of asymptotic series for the kinematics of high solitary waves |
| *G. Contento* | 531 | Numerical wave tank computations of nonlinear motions of two-dimensional arbitrarily shaped free floating bodies |
| | | Technical Notes |
| *Z. L. Zou* | 557 | A new form of higher order Boussinesq equations |
| *P. C. Liu* | 577 | Is the wind wave frequency spectrum outdated |


## Number 6


| | | |
|---|---|---|
| *C.-Y. Lin* | 589 | Influences of vanadium compound on burning characteristics of emulsified marine fuel oil C |
| *A. N. Williams and W. W. Crull* | 603 | Simulation of directional waves in a numerical basin by a desingularized integral equation approach |
| *K. J. Spyrou* | 625 | Designing against parametric instability in following seas |
| *S. Surendran* | 655 | Handling and launching of heavy concrete caissons in a marine environment |
| *A. Sarkar and R. Eatock Taylor* | 667 | Effects of mooring line drag damping on response statistics of vessels excited by first- and second-order wave forces |

| | | |
|---|---|---|
| *C. J. Damaren* | 687 | Time-domain floating body dynamics by rational approximation of the radiation impedance and diffraction mapping |


## Number 7


| | | |
|---|---|---|
| *J. Skourup, K. F. Cheung, H. B. Bingham and B. Büchmann* | 707 | Loads on a 3D body due to second-order waves and a current |
| *K. S. Varyani, R. M. Gatiganti and M. Gerigk* | 729 | Motions and slamming impact on catamaran |
| *P. A. A. Laura, R. H. Gutiérrez, H. C. Sanzi and G. Elvira* | 749 | Buckling of circular, solid and annular plates with an intermediate circular support |
| *R. Carnicer, A. Bergmann and P. A. A. Laura* | 757 | Plane state of stress and transverse oscillations of a simply supported rectangular plate |
| | | *Technical Notes* |
| *C. T. F. Ross and J. R. Sadler* | 765 | Inelastic shell instability of thin-walled circular cylinders under external hydrostatic pressure |
| *S. Neelamani, G. Koether, H. Schüttrumpf, M. Muttray and H. Oumeraci* | 775 | Wave forces on, and water-surface fluctuations around a vertical cylinder encircled by a perforated square caisson |


## Number 8


| | | |
|---|---|---|
| *R.-S. Tseng, R.-H. Wu and C.-C. Huang* | 801 | Model study of a shoreline wave-power system |
| *X. Wang, D. S. Jeng and Y. S. Lin* | 823 | Effects of a cover layer on wave-induced pore pressure around a buried pipe in an anisotropic seabed |
| *A. N. Williams and W. Li* | 841 | Water wave interaction with an array of bottom-mounted surface-piercing porous cylinders |
| *J. M. Niedzwecki, J. W. van de Lindt, J. H. Gage and P. S. Teigen* | 867 | Design estimates of surface wave interaction with compliant deepwater platforms |

*V. Sanil Kumar, M. C. Deo, N. M. Anand and K. Ashok Kumar* 889 Directional spread parameter at intermediate water depth

## Number 9

*M. C. Deo and N. Kiran Kumar* 907 Interpolation of wave heights

*M. Taylan* 921 The effect of nonlinear damping and restoring in ship rolling

*C. T. F. Ross and A. Gill-Carson* 933 Collapse of dome cup ends under external hydrostatic pressure

*B.-F. Chen and H.-W. Chiang* 953 Complete two-dimensional analysis of sea-wave-induced fully non-linear sloshing fluid in a rigid floating tank

*K. Podgórski, I. Rychlik and U. E. B. Machado* 979 Exact distributions for apparent waves in irregular seas

## Number 10

*M. E. McCormick and R. Bhattacharyya* 1017 Editorial

*J. Wang* 1019 A subjective modelling tool applied to formal ship safety assessment

*S. Chakrabarti* 1037 Hydrodynamic interaction forces on multi-moduled structures

*M. Drago and L. Iovenitti* 1065 $\sigma$-Coordinates hydrodynamic numerical model for coastal and ocean three-dimensional circulation

*A. Raghothama and S. Narayanan* 1087 Bifurcation and chaos of an articulated loading platform with piecewise non-linear stiffness using the incremental harmonic balance method

*C. Lei, L. Cheng, S.W. Armfield and K. Kavanagh* 1109 Vortex shedding suppression for flow over a circular cylinder near a plane boundary

*M. Daskovsky* 1129 The hydrofoil in surface proximity, theory and experiment

## Number 11

*P. T. Pedersen and S. Zhang* 1161 Effect of ship structure and size on grounding and collision damage distributions

*S. P. R. Czitrom, R. Godoy, E. Prado, P. Pérez and R. Peralta-Fabi* 1181 Hydrodynamics of an oscillating water column seawater pump. Part I: theoretical aspects

*S. P. R. Czitrom, R. Godoy, E. Prado, A. Olvera and C. Stern* 1199 Hydrodynamics of an oscillating water column seawater pump. Part II: tuning to monochromatic waves

*P. C. Liu* 1221 Wave grouping characteristics in nearshore Great Lakes

*A. N. Williams, A.-E. M. Mansour and H. S. Lee* 1231 Simplified analytical solutions for wave interaction with absorbing-type caisson breakwaters

*P. Filianoti* 1249 Diffraction of random wind-generated waves by detached breakwater or breakwater gap

*M. D. Earle, K. E. Steele and D. W. C. Wang* 1265 Comments and discussion on 'Wave direction analysis from data buoys' by Min-Chih Huang and Jia-Yuan Chen

*M.-C. Huang and J.-Y. Chen* 1273 Reply to the comments by Earle, Steele and Wang on 'Wave direction analysis from data buoys'

## Number 12

*T. L. Walton Jr* 1279 Distributions for storm surge extremes

*S. R. Sabag, B. L. Edge and I. Soedigdo* 1295 Wake II model for hydrodynamic forces on marine pipelines including waves and currents

*T. W. Treakle III, D. T. Mook, S. I. Liapis and A. H. Nayfeh* 1321 A time-domain method to evaluate the use of moving weights to reduce the roll motion of a ship

| | | |
|---|---|---|
| *J. W. Leonard, K. Idris and S. C. S. Yim* | 1345 | Large angular motions of tethered surface buoys |
| *C. T. F. Ross and J. Etheridge* | 1373 | The buckling and vibration of tube-stiffened axisymmetric shells under external hydrostatic pressure |
| *J.-B. Song, Y.-H. Wu and B. Wiwatanapataphee* | 1391 | Probability distribution of random wave forces in weakly nonlinear random waves |
| *K. F. Cheung, A. C. Phadke, D. A. Smith, S. K. Lee and L. H. Seidl* | 1407 | Hydrodynamic response of a pneumatic floating platform |
| *R. G. Lueck, F. R. Driscoll and M. Nahon* | 1441 | A wavelet for predicting the time-domain response of vertically tethered systems |
| *K. Nagamani and C. Ganapathy* | 1455 | *Technical Notes*<br>The dynamic response of a three-leg articulated tower |
| *U. A. Korde* | 1473 | A note on the hydrodynamics of a tail tube buoy |